

at least a part of its surface, and the uneven geometry is substantially comprised of a plurality of depressions, wherein the depressions are arranged along varied directions on the surface.

114. (New) An electron beam apparatus comprising a hermetic container which includes an electron source having electron emission devices and targets exposed to electrons emitted from said electron source and further comprising a first member within said hermetic container, wherein said first member is provided with an uneven geometry on at least a part of its surface, the uneven geometry being substantially comprised of a plurality of depressions, wherein the depressions have various amplitudes.

115. (New) An electron beam apparatus comprising a hermetic container which includes an electron source having electron emission devices and targets exposed to electrons emitted from said electron source and further comprising a first member within said hermetic container, wherein said first member is provided with an uneven geometry on at least a part of its surface, the uneven geometry being substantially comprised of a plurality of depressions, and wherein the depressions have various pitches.

116. (New) An electron beam apparatus according to claim 113, wherein the directions along which said depressions are arranged are random.

117. (New) An electron beam apparatus according to claim 114, wherein the amplitudes of said depressions are random.

118. (New) An electron beam apparatus according to claim 115, wherein the pitches of said depressions are random.

119. (New) An electron beam apparatus according to any one of claims 113-115, wherein said first member has a roughing film.

120. (New) An electron beam apparatus comprising a hermetic container which includes an electron source having electron emission devices and targets exposed to electrons emitted from said electron source and further comprising a first member within said hermetic container, wherein said first member is provided with an uneven geometry on at least a part of its surface, the uneven geometry being substantially comprised of a plurality of depressions, wherein there is a multiplicity of cycles of said depressions.

121. (New) An electron beam apparatus comprising a hermetic container which includes an electron source having electron emission devices and targets exposed to electrons emitted from said electron source and further comprising a first member within said hermetic container, wherein said first member is provided with an uneven geometry on at least a part of its surface, and the uneven geometry is substantially comprised of a plurality of depressions, wherein there is a multiplicity of amplitudes of said depressions.

122. (New) An electron beam apparatus comprising a hermetic container which includes an electron source having electron emission devices and targets exposed to electrons emitted from said electron source and further comprising a first member within said hermetic container, wherein said first member is provided with an uneven geometry on at least a part of its surface, and the uneven geometry is substantially comprised of a plurality of depressions and is formed by multiplying one cycle of said depressions with random cycles of said depressions different from the one cycle.